Assignment 5-2 The Summation of Even Integers

You are given two positive integers a and b, where $a \le b$. In this problem you'll have to find out the sum of all the even integers in the range [a, b].

Input

The input consists of t (30 $\leq t \leq$ 40) test cases. The first line of the input contains only positive integer t. Then t test cases follow. Each test case consists of exactly one line with two positive integers a and b (1 $\leq a \leq b \leq$ 10000), separated by a single space.

Output

For each test case, you are to output a single line containing the sum of the even integers in the range [a, b].

Sample Input

4

3 19

5 18

2 17

4 20

Sample Output

88

84

72

108

Requirements

In your program, you are required to write a recursive function int evenSum(int a, int b) which returns the sum of the even integers in the range [a, b], where $a \le b$.